

WE CLAIM:

1. A disposable cleaning substrate comprising:
 - a. cellulosic fibers, wherein said cellulosic fibers are present throughout said substrate and wherein said cellulosic fibers vary from less than about 25% on one side of said substrate to greater than about 75% on the other side of said substrate,
 - b. thermoplastic fibers of about 2 to 25 denier, wherein said thermoplastic fibers are concentrated on the side of said substrate having lower cellulosic content, and
 - c. a binder to bind said fibers of a. and b. to said substrate.
2. The substrate of claim 1, wherein said binder comprises binders selected from a group consisting of liquid emulsions, latex binders, liquid adhesives, hot melt polymers, chemical bonding agents, and mixtures thereof.
3. The substrate of claim 2, wherein said binder is a latex binder.
4. The substrate of claim 3, wherein said binder has a Tg greater than 0°C.
5. The substrate of claim 3, wherein said binder has a Tg greater than 20°C.
6. The substrate of claim 3, wherein said binder has a Tg greater than 30°C.
7. The substrate of claim 1, wherein said substrate is a wet wipe.
8. The substrate of claim 1, wherein said substrate is a dry wipe.
9. The substrate of claim 1, wherein said substrate further comprises surfactants in a cleaning effective amount.
10. The substrate of claim 1, wherein said substrate further comprises surfactants in a cleaning effective amount and is dry-to-the-touch.
11. The substrate of claim 1, wherein said substrate is attached to a cleaning device or implement.
12. The substrate of claim 11, wherein said substrate further comprises surfactants in a cleaning effective amount.
13. The substrate of claim 11, wherein said substrate is attached to a cleaning device comprising a floor mop.
14. The substrate of claim 11, wherein said substrate is attached to a cleaning device selected from a group consisting of a toilet cleaning device, a bathroom cleaning device, and a shower cleaning device.
15. The substrate of claim 1, wherein said substrate is part of a mitt or glove.

16. The substrate of claim 15, wherein said substrate further comprises surfactants in a cleaning effective amount.
17. The substrate of claim 1, wherein said substrate is of unitized, airlaid construction.
18. The substrate of claim 1, wherein said cellulosic fibers comprise at least about 5% of the side of said substrate having lower cellulosic content.
19. The substrate of claim 1, wherein said thermoplastic fibers comprise less than about 30% of said total cleaning substrate.
20. The substrate of claim 1, wherein said substrate has a bulk density of less than about 0.10 g/cc.
21. The substrate of claim 20, wherein said substrate has a thickness greater than about 2 mm.
22. The substrate of claim 20, wherein said substrate has a thickness greater than about 3 mm.
23. The substrate of claim 20, wherein said substrate has a thickness greater than about 4 mm.
24. The substrate of claim 20, wherein said substrate has a coefficient of static friction greater than 0.600.
25. The substrate of claim 20, wherein said substrate has a coefficient of kinetic friction greater than 0.400.
26. The substrate of claim 20, wherein said substrate has a ratio of the coefficient of static friction to coefficient of kinetic of greater than about 1.5.
27. The substrate of claim 20, wherein said substrate has a MD tensile greater than about 500.
28. The substrate of claim 20, wherein said substrate has a MD tensile greater than about 700.
29. The substrate of claim 20, wherein said substrate has a CD tensile greater than about 400.
30. The substrate of claim 1, wherein said substrate has a bulk density of less than about 0.08 g/cc.
31. The substrate of claim 1, wherein said substrate has a bulk density of less than about 0.06 g/cc.
32. The substrate of claim 1, wherein said substrate has a total absorbency greater than about 8 g/g.

33. The substrate of claim 1, wherein said substrate has a total absorbency greater than about 10 g/g.
34. The substrate of claim 1, wherein said substrate has a total absorbency greater than about 15 g/g.
35. The substrate of claim 1, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.5 times.
36. The substrate of claim 1, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.0 times.
37. The substrate of claim 1, wherein said substrate has an absorbency rate change over 5 doses of less than about 1.5 times.
38. The substrate of claim 1, wherein said substrate further comprises superabsorbent materials.
39. The substrate of claim 38, wherein said superabsorbent materials are limited to a specific area of the substrate.
40. The substrate of claim 38, wherein said superabsorbent materials are distributed across the cleaning substrate.
41. A disposable cleaning substrate comprising:
 - a. cellulosic fibers, wherein said cellulosic fibers are present throughout said substrate and wherein said cellulosic fibers vary from less than about 25% on one side of said substrate to greater than about 75% on the other side of said substrate;
 - b. thermoplastic fibers of about 2 to 25 denier, wherein said thermoplastic fibers are concentrated on the side of said substrate having lower cellulosic content;
 - c. multicomponent fibers, and
 - d. a binder to bind said fibers of a. and b. and c. to said substrate.
42. The substrate of claim 41, wherein said binder comprises binders selected from a group consisting of liquid emulsions, latex binders, liquid adhesives, chemical bonding agents, and mixtures thereof.
43. The substrate of claim 41, wherein said multicomponent fibers comprise from about 1 to about 20% of said substrate.
44. The substrate of claim 41, wherein said multicomponent fibers comprise from about 5 to about 15% of said substrate.

45. The substrate of claim 42, wherein said binder is a latex binder.
46. The substrate of claim 45, wherein said binder has a Tg greater than 0° C.
47. The substrate of claim 45, wherein said binder has a Tg greater than 20° C.
48. The substrate of claim 45, wherein said binder has a Tg greater than 30° C.
49. The substrate of claim 41, wherein said substrate is a wet wipe.
50. The substrate of claim 41, wherein said substrate is a dry wipe.
51. The substrate of claim 41, wherein said substrate further comprises surfactants in a cleaning effective amount.
52. The substrate of claim 41, wherein said substrate further comprises surfactants in a cleaning effective amount and is dry-to-the-touch.
53. The substrate of claim 41, wherein said substrate is attached to a cleaning device.
54. The substrate of claim 53, wherein said substrate further comprises surfactants in a cleaning effective amount.
55. The substrate of claim 53, wherein said substrate is attached to a cleaning device comprising a floor mop.
56. The substrate of claim 53, wherein said substrate is attached to a cleaning device selected from a group consisting of a toilet cleaning device, a bathroom cleaning device, and a shower cleaning device.
57. The substrate of claim 41, wherein said substrate is part of a mitt or glove.
58. The substrate of claim 57, wherein said substrate further comprises surfactants in a cleaning effective amount.
59. The substrate of claim 41, wherein said substrate is of unitized, airlaid construction.
60. The substrate of claim 41, wherein said cellulosic fibers comprise at least about 5% of the side of said substrate having lower cellulosic content.
61. The substrate of claim 41, wherein said thermoplastic fibers comprise less than about 30% of said total cleaning substrate.
62. The substrate of claim 41, wherein said substrate has a bulk density of less than about 0.10 g/cc.
63. The substrate of claim 62, wherein said substrate has a thickness greater than about 2 mm.
64. The substrate of claim 62, wherein said substrate has a thickness greater than about 3 mm.

65. The substrate of claim 62, wherein said substrate has a thickness greater than about 4 mm.
66. The substrate of claim 62, wherein said substrate has a coefficient of static friction greater than 0.600.
67. The substrate of claim 62, wherein said substrate has a coefficient of kinetic friction greater than 0.400.
68. The substrate of claim 62, wherein said substrate has a ratio of the coefficient of static friction to coefficient of kinetic of greater than about 1.5.
69. The substrate of claim 62, wherein said substrate has a MD tensile greater than about 500.
70. The substrate of claim 62, wherein said substrate has a MD tensile greater than about 700.
71. The substrate of claim 62, wherein said substrate has a CD tensile greater than about 400.
72. The substrate of claim 41, wherein said substrate has a bulk density of less than about 0.08 g/cc.
73. The substrate of claim 41, wherein said substrate has a bulk density of less than about 0.06 g/cc.
74. The substrate of claim 41, wherein said substrate has a total absorbency greater than about 8 g/g.
75. The substrate of claim 41, wherein said substrate has a total absorbency greater than about 10 g/g.
76. The substrate of claim 41, wherein said substrate has a total absorbency greater than about 15 g/g.
77. The substrate of claim 41, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.5 times.
78. The substrate of claim 41, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.0 times.
79. The substrate of claim 41, wherein said substrate has an absorbency rate change over 5 doses of less than about 1.5 times.
80. The substrate of claim 41, wherein said substrate further comprises superabsorbent materials.

81. The substrate of claim 80, wherein said superabsorbent materials are limited to a specific area of the substrate.
82. The substrate of claim 80, wherein said superabsorbent materials are distributed across the cleaning substrate.
83. A disposable cleaning substrate comprising:
 - a. cellulosic fibers, wherein said cellulosic fibers vary from less than about 25% on one side of said substrate to greater than about 75% on the other side of said substrate;
 - b. thermoplastic fibers of about 2 to 25 denier, wherein said thermoplastic fibers are concentrated on the side of said substrate having lower cellulosic content;
 - c. multicomponent fibers, and
 - d. a binder to bind said fibers of a. and b. and c. to said substrate.
84. The substrate of claim 83, wherein said binder comprises binders selected from a group consisting of liquid emulsions, latex binders, liquid adhesives, chemical bonding agents, and mixtures thereof.
85. The substrate of claim 83, wherein said multicomponent fibers comprise from about 1 to about 20% of said substrate.
86. The substrate of claim 83, wherein said multicomponent fibers comprise from about 5 to about 15% of said substrate.
87. The substrate of claim 84, wherein said binder is a latex binder.
88. The substrate of claim 87, wherein said binder has a Tg greater than 0° C.
89. The substrate of claim 87, wherein said binder has a Tg greater than 20° C.
90. The substrate of claim 87, wherein said binder has a Tg greater than 30° C.
91. The substrate of claim 83, wherein said substrate is a wet wipe.
92. The substrate of claim 83, wherein said substrate is a dry wipe.
93. The substrate of claim 83, wherein said substrate further comprises surfactants in a cleaning effective amount.
94. The substrate of claim 83, wherein said substrate further comprises surfactants in a cleaning effective amount and is dry-to-the-touch.
95. The substrate of claim 83, wherein said substrate is attached to a cleaning device.
96. The substrate of claim 95, wherein said substrate further comprises surfactants in a cleaning effective amount.

97. The substrate of claim 95, wherein said substrate is attached to a cleaning device comprising a floor mop.
98. The substrate of claim 95, wherein said substrate is attached to a cleaning device selected from a group consisting of a toilet cleaning device, a bathroom cleaning device, and a shower cleaning device.
99. The substrate of claim 83, wherein said substrate is part of a mitt or glove.
100. The substrate of claim 99, wherein said substrate further comprises surfactants in a cleaning effective amount.
101. The substrate of claim 83, wherein said substrate is of unitized, airlaid construction.
102. The substrate of claim 83, wherein said cellulosic fibers comprise at least about 5% of the side of said substrate having lower cellulosic content.
103. The substrate of claim 83, wherein said thermoplastic fibers comprise less than about 30% of said total cleaning substrate.
104. The substrate of claim 83, wherein said substrate has a bulk density of less than about 0.10 g/cc.
105. The substrate of claim 104, wherein said substrate has a thickness greater than about 2 mm.
106. The substrate of claim 104, wherein said substrate has a thickness greater than about 3 mm.
107. The substrate of claim 104, wherein said substrate has a thickness greater than about 4 mm.
108. The substrate of claim 104, wherein said substrate has a coefficient of static friction greater than 0.600.
109. The substrate of claim 104, wherein said substrate has a coefficient of kinetic friction greater than 0.400.
110. The substrate of claim 104, wherein said substrate has a ratio of the coefficient of static friction to coefficient of kinetic of greater than about 1.5.
111. The substrate of claim 104, wherein said substrate has a MD tensile greater than about 500.
112. The substrate of claim 104, wherein said substrate has a MD tensile greater than about 700.

113. The substrate of claim 104, wherein said substrate has a CD tensile greater than about 400.
114. The substrate of claim 83, wherein said substrate has a bulk density of less than about 0.08 g/cc.
115. The substrate of claim 83, wherein said substrate has a bulk density of less than about 0.06 g/cc.
116. The substrate of claim 83, wherein said substrate has a total absorbency greater than about 8 g/g.
117. The substrate of claim 83, wherein said substrate has a total absorbency greater than about 10 g/g.
118. The substrate of claim 83, wherein said substrate has a total absorbency greater than about 15 g/g.
119. The substrate of claim 83, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.5 times.
120. The substrate of claim 83, wherein said substrate has an absorbency rate change over 5 doses of less than about 2.0 times.
121. The substrate of claim 83, wherein said substrate has an absorbency rate change over 5 doses of less than about 1.5 times.
122. The substrate of claim 83, wherein said substrate further comprises superabsorbent materials.
123. The substrate of claim 122, wherein said superabsorbent materials are limited to a specific area of the substrate.
124. The substrate of claim 122, wherein said superabsorbent materials are distributed across the cleaning substrate.